

Final Work Plan - California Regional PM10/PM2.5 Air Quality Study Ammonia Emissions Improvement Projects in Support of CRPAQS Aerosol Modeling and Data Analyses: Draft Ammonia Inventory Development (page 2-14)

Wastewater Treatment

The ENVIRON team will identify a preliminary list of wastewater treatment plants (POTWs) from the California State Water Resources Control Board (SWRCB) Database of Waste Dischargers. Because past researchers have noted that not all POTWs are listed on the SWRCB database, the ENVIRON team will contact local sanitation district's within the study area to identify any additional facilities. The ENVIRON team will survey POTWs to determine the extent to which sludge drying occurs at the facilities or off-site within the study domain or outside of the study domain and to determine flow rates if not available from the SWRCB database. We will assign emissions specific to sludge drying to those facilities where sludge drying occurs. Emissions for sludge drying will be estimated from field data collected at the Visalia Plant by STI (1998). Emissions from water treatment will be estimated using the emission factor developed for STI (1998) from a regression analysis of self reported ammonia emissions and flow rates. This emission factor is consistent with the emission factor developed by ATC (2000) from source test results at two POTWs. The activity data, flow rates, will be from the SWRCB database or telephone survey for unlisted facilities. Facility addresses will be geo-coded and the emissions allocated as point sources.